1.) Give an example of a linear, quadratic, and exponential function.

2.) Describe the transformation from *f(x)* to *g(x)*.



3.) Write the transformation of *f* that is reflected across the y-axis.



4.) Two thousand dollars is invested at 8% interest compounded annually. Using the formula determine how much the investment is worth after 1 year.

5.) $1200 is invested at 6.5% interest compounded daily. Using the formula determine how much the investment is worth after 1 year.

6.) Express in terms of and : 

7.) Express in terms of and : 

8.) Express as a single logarithm: 

9.) Express in terms of and : 

10.) Simplify: 

11.) Simplify: 

12.) Simplify: 

13.) Write an equivalent logarithmic equation of 

14.) Write an equivalent exponential equation of 

15.) Solve for x and round to the nearest hundredth: 

16.) Solve for x and round to the nearest hundredth: 

17.) Solve for x and round to the nearest hundredth: 

18.) Solve for x: 

19.) Solve for x: 

20.) Solve for x: 

21.) Classify the polynomial by degree and number of terms: 

22.) Classify the polynomial by degree and number of terms: 

23.) Classify the polynomial by degree and number of terms: 

24.) Add/Subtract: 

25.) Add/Subtract: 

26.) Add/Subtract: 

27.) Multiply: 

28.) Multiply: 

29.) Multiply: 

30.) Divide: 

31.) Divide: 

32.) Divide: 

33.) List the factors of .

34.) List the factors of .

35.) Determine if x – 1 is a factor of . If not, what is the remainder?

36.) Find the roots of .

37.) Find the roots of .

38.) Determine the end behavior of .

39.) Determine the end behavior of .

40.) Simplify: 

41.) Simplify: 

42.) Simplify: 

43.) Multiply : 

44.) Multiply: 

45.) Divide: 

46.) Divide: 

47.) Simplify: 

48.) Simplify: 

49.) Simplify: 

50.) Simplify: 

51.) Solve: 

52.) Solve: 

53.) Solve: 

54.) Solve: 

55.) Solve: 

56.) If y varies directly as x, and y = 4 when x = 12, find y when x = −2.

57) If y varies inversely as x, and y = -1 when x = 4, find y when x = 2.

58.) What type of variation is represented by the following equation

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